Georgia Department of Natural Resources

205 Butler Street, S.E., Floyd Towers East, Atlanta, Georgia 30334

J. Leonard Ledbetter, Commissioner Harold F. Reheis, Assistant Director evironmental Protection Division

May BRECEIVE

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JUN 0 1 1989

MEMORANDUM

TO:

Georgia Geologic Survey

Atlanta, Georgia 30334

19 Martin Luther King, Jr., Dr., S.W.

Reply To:

Room 400

(404)656-3214

Ron Methier

Air Quality

AIR PROTECTION BRANCH

FROM:

Bruce J. O'Connor

Geologic Survey

SUBJECT: Mineral Content of Chatsworth Talc Deposits

As we discussed in our recent telephone conversation, I am enclosing the two reports on the talc deposits mined by the Southern Talc Company near Chatsworth, Murray Co., Georgia. The reports contain only general mineralogical information in as much as they deal largely with the geology of the deposits.

Bulletin 53 (Furcron and others, 1947) describes the mineralogy of the talc ore bodies on p. 30-31, 38-41 and some on p.44-57. In the more recent report "Talc Deposits of the Coosa Valley" (Needham & Hurst, 1970) the mineralogy of the talc ore bodies is mainly described in p. 26-27 and to lesser extent on p. 8-25. However, it should be noted that all these identifications are based upon standard optical microscopic methods. No x-ray or electron microscpoic studies were made.

According to these reports, the ore is principally composed of the mineral talc. Although a variety of other minerals are locally present, they usually are only present in small amounts in the ore. Serpentine group minerals (antigorite, chrysolite, & picrolite) and amphibole group minerals (actinolite & anthophyllite) are reported, but they were not characterized in detail. Both reports also mention a wide variety of minerals found within other rocks of the area; however, these are not normally mined during talc ore extraction.

Southern Talc has recently changed ownership; however, I believe they are still mining the same materials as described in these reports. You may wish to contact the company for more detailed information on the precise nature of the minerals in their talc ore.

I hope this provides the information you need. Please do not hesitate to call if you have any further questions.

BJO:rl

cc: W. McLemore

E. Shapiro